



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,185	04/19/2004	Mike Musgrave	COS-889	2436

7590 10/03/2006

David J. Alexander  
Fina Technology, Inc.  
P.O. Box 674412  
Houston, TX 77267-4412

EXAMINER

LEE, RIP A

ART UNIT PAPER NUMBER

1713

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/827,185

Applicant(s)

MUSGRAVE ET AL.

Examiner

Rip A. Lee

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-34 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,8,9,11-18, 20-24 and 26-30 is/are rejected.
- 7) ☒ Claim(s) 5,7,10,19 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This office action follows a response filed on July 12, 2006. Claims 1, 4, 5, 8, 12, 15, 21, 27 were amended, claim 2 was canceled, and new claims 31-34 were added. Claims 1 and 3-34 are pending.

#### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 3, 4, 6, 8, 9, 11-18, 20-24, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meka *et al.* (U.S. 2005/0009991) in view of McCullough (U.S. 6,05,854) for the same reasons set forth in the previous office action.

Briefly, Meka *et al.* discloses a composition comprising 50-85 wt % of impact copolymer (PP 7032E2; EP rubber content of 17 wt %, an ethylene content of 53 wt %, MFR of 4 g/10 min) and 15-50 wt % of plastomer, the latter of which is a random copolymer. The inventors contemplate use of dibenzylidene sorbitol based nucleating agents, however, there is no disclosure on the amount which is to be used.

McCullough teaches impact copolymers are hazy due to the fact that they contain a rubbery dispersed phase. The inventor has found that dibenzylidene sorbitol nucleating agent, used in amounts of about 800 ppm to about 5000 ppm, is especially well suited for impact copolymer compositions in that it imparts clarity to said compositions.

From these teachings, one having ordinary skill in the art would have found it obvious to use dibenzylidene sorbitol nucleating agent at levels of about 800 ppm to about 5000 ppm in the compositions of Meka *et al.* because McCullough teaches this beneficial working amount.

There is no indication of the claimed properties in the cited references, however, in view of the fact that the materials of the prior art are essentially the same as that recited in the claims, a reasonable basis exists to believe that they exhibit essentially the same physical properties. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish

Art Unit: 1713

an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

***Allowable Subject Matter***

3. As indicated previously, claims 5, 7, 10, 19, and 25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 31-34 are allowed over the closest references cited below. The subject matter of the claims are centered about a blend comprising (i) about 20 wt % to about 60 wt % of impact copolymer, (ii) about 300 to about 4000 ppm of clarifying agent, and (iii) random copolymer comprising from about 0.15 wt % to about 4.0 wt % of ethylene, comprising the balance of said blend.

Meka *et al.* (vide supra) does not teach the subject matter of instant claims 31-34.

Datta *et al.* (U.S. 6,642,316) teaches a blend comprising a reactor copolymer (Escorene 9272) or an impact copolymer (Escorene 7132) and a random copolymer having an ethylene content of 5.8 wt %. The amount of ethylene in the random copolymer lies outside the claimed range.

Kobylyvker *et al.* (U.S. 6,072,005) discloses a composition comprising a blend of impact copolymer (Exxon ICP PD-7623 E7) and a propylene-ethylene random copolymer (Union Carbide 6D82) having an ethylene content of 5.5 wt %. The amount of ethylene in the random copolymer lies outside the claimed range.

### ***Response to Arguments***

5. Applicant's arguments have been considered fully, but they are not persuasive. Applicant submits that there is no motivation to combine teachings because the references relate to two different types of copolymer. Specifically, Applicant claims that whereas the primary reference, Meka *et al.*, relates to ICP/RCP blends, the secondary reference, McCullough, relates to ICP only. While this may be the case, one of skill in the art would turn to McCullough in order to determine the amount of dibenzylidene sorbitol, the use of which is taught by Meka *et al.*, to add to the composition in order to nucleate/clarify the ICP component. That the composition contains RCP has no bearing on the motivation to combine teachings. In fact, the combination of teachings is obvious because Meka *et al.* already prescribes use of dibenzylidene sorbitol nucleating agents for impact copolymers, and McCullough fills in an otherwise obvious missing quantity. One of ordinary skill in the art would have found it obvious to arrive at the subject matter of the instant claims because such an embodiment flows naturally from the teachings of the two patents.

To date, Applicant has not met the burden of proof by establishing any unobviousness differences between the properties of the composition of the prior art and that of the instant claims.

In light of this and previous discussion, the rejection of record has not been withdrawn.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Art Unit: 1713

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

ral

September 28, 2006

  
DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700